# How are weather temperature records broken?

## Description

At the Met Office we report weather extremes, such as the maximum monthly temperatures, as well as long-term weather averages. This post is in response to questions posed by our Twitter followers, who have been asking how maximum temperatures are measured and why observations from some thermometers are not valid for official records.

**How are official temperatures measured?**

Since the 1960's only observations from stations that meet specific criteria and that are calibrated and regularly checked by the Met Office are used for quoting temperatures.

Stevenson screen

Thermometers must be housed in a Stevenson screen with its door facing north. A Stevenson screen is a white slatted box which houses the thermometer away from direct sunlight and allows air to flow freely through it.

The location of the Stevenson screen is important to ensure consistency across sites. It should be mounted at a height of 1.25m on level grassy ground, away from trees and man made structures. It should also be at least 20m away from any area of concrete or hard-standing, and only half the area within 100m radius of the screen can be covered with buildings or man made surfaces.

The thermometer itself must measure temperatures to the nearest decimal point. This is why observations from some stations – such as METAR stations at airports – aren't included in official records, as they normally only record the temperature to the nearest whole number.

**When are maximum temperatures officially recognised as a new record?**

Each day real time data is subject to preliminary quality control before it is released, such as cross checking against nearby stations. A record will not become official until thorough quality control has taken place on the data, which may take several months.

**How far do records go back?**

Met Office standardised daily temperature records were started in the 1960s, however there are historical paper records for earlier dates held in the National Meteorological Library and Archive. Our National record for the UK goes back to 1910, although there are others that go back further such as the Central England Temperature Record. Individual station statistics go back varying lengths of time dependig on when each station was opened.

**Why are some places often the warmest?**

Although all thermometers are housed in standard conditions the geographical location of the station does still have an impact on the temperatures recorded. An example is the Gravesend station, which recorded the highest temperature in the UK this Wednesday. The station is surrounded by a built-up industrial area, which could lead to a slightly higher maximum temperature due to factors such as heat being absorbed by buildings.

For full weather extremes listings and historical records go the Met Office Climate section.

**Related articles**

- What is an 'Indian summer'? (metofficenews.wordpress.com)

**Date Created**
September 2011

# Typhoon Nesat brings heavy rain and strong winds to the Philippines.

## Description

Typhoon Nesat made landfall at about 2200 UTC 26 September near Casiguran on the east coast of the island of Luzon in the Philippines. Winds were estimated to be close to 120 mph near the centre of the typhoon and the lowest central pressure was estimated to be near 944mb. Good forecasts of the typhoon's track in the previous two days allowed authorities to order the evacuation of over 100,000 people in its path.

Satellite image of Typhoon Nesat as it makes landfall

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Satellite image of Typhoon Nesat as it makes landfall

Although well south of the typhoon centre the Philippine capital Manila received heavy rain and strong winds causing much disruption including the flooding of the main hospital and US Embassy buildings. Subic Bay on the west coast of Luzon just to the north-west of Manila recorded 350mm (13.8?) rain in 12 hours.

As of 1200 UTC 27 September Nesat was still classified as a typhoon and has started to restrengthen over the South China Sea. Current forecasts predict a second landfall over Hainan island on Thursday and over northern Vietnam on Friday.

You can follow all the latest Tropical Storm News on:

http://twitter.com/metofficestorms

**Date Created**
September 2011

# What has brought the warm autumn weather to the UK?

## Description

Over the next few days we are expecting a spell of very warm weather for this time of year across much of England and Wales and even parts of Scotland too. The reason why we are seeing this unseasonable warm spell is due to an area of high pressure which has developed across much of central Europe, centred on Germany and Poland.

This draws up very warm air from a long way south, from parts of France and Spain. That comes across a dry continent removing most of the moisture out of the air. As a result we see very little in the way of cloud with blue skies and plenty of sunshine. As a result the sunshine warms the ground and the ground warms the air so we see high temperatures for this time of the year.

In the video below Paul Gundersen, Met Office Chief Forecaster provides more details about this warm spell, how long it will last and whether this really is an ‘Indian Summer’.

**Related articles**

- What is an ‘Indian summer’? (metofficenews.wordpress.com)
- Britain Set For Balmy 28C Autumn Hot Spell (news.sky.com)
- Britain to be ‘hotter than Hawaii’ this week (telegraph.co.uk)

**Date Created**
September 2011

# What is an ‘Indian summer’?

## Description

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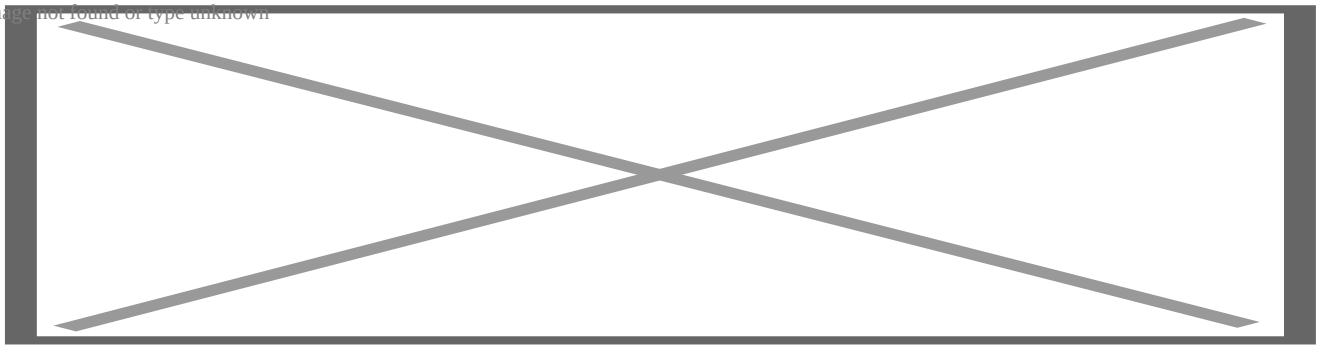

After a cooler than average summer, a spell of settled weather is expected later this week, with temperatures up to 27 °C possible in some areas from mid week.

Many media reports are calling this settled spell an ‘Indian summer’, however according to the Met Office’s Meteorological Glossary, it’s a little too early in the year. An Indian summer is defined as a warm, calm spell of weather occurring in autumn, especially in October and November.

William R Deedler, Weather Historian at the United States National Weather Service, describes it as “any spell of warm, quiet, hazy weather that may occur in October or even early November”.

The origins of the term Indian summer are uncertain, but several writers suggest it may be have been based on the warm, hazy conditions in autumn when native American Indians chose to hunt. The earliest record of the use of the term is in America at the end of the 18th century. Although William R Deedler also refers to a reference by a French man, John de Crevecoeur, in 1778:

> “Sometimes the rain is followed by an interval of calm and warmth which is called the Indian Summer; its characteristics are a tranquil atmosphere and general smokiness. Up to this epoch the approaches of winter are doubtful; it arrives about the middle of November, although snows and brief freezes often occur long before that date.”

The term was first used in the British Isles at the beginning of the 19th century, but there is no statistical evidence to show that such a warm spell tends to recur each year. The warmest recorded temperatures in the UK in October and November are 29.4°C on 1 October 1985, in Cambridgeshire, and 21.1°C on 2 November 1938, in Essex and Suffolk.

For the latest weather forecast go to www.metoffice.gov.uk/weather

### Related articles

- UK is set for an Indian summer (guardian.co.uk)

- Britain set to bask in Indian summer (independent.co.uk)
- Brits braced for Indian summer (thesun.co.uk)
- Britain set for Indian summer as temperatures may soar to 27C next week (mirror.co.uk)
- Heatwave to make Britain hotter than Hawaii (telegraph.co.uk)
- Indian summer on its way (telegraph.co.uk)

**Date Created**
September 2011

# September to finish on a high for parts of the UK

## Description

Many parts of the UK are expected to see some fine weather during the last few days of September and into the beginning of October.

Early signs suggest there will be several days of warm and dry weather, giving the most settled conditions seen for several weeks.

The best of the weather will be seen in south and east, where temperatures could reach 27 °C. Average maximum temperatures for the UK are 16.1 °C in September and 12.5 °C in October.

Chris Tubbs, Met Office Chief Forecaster, said: “It’s too early to give precise detail, but the dominant signal is for much of the UK to get some fine weather from Tuesday onwards. Temperatures could be unseasonably warm in places, certainly well above the average for this time of year.

“The settled weather is set to last for several days and could carry on into the start of October, giving us a welcome respite from the windy and wet conditions which have dominated for the past few weeks.”

Daytime maximum temperatures are set to be above average even over this weekend, with parts of the south east around 22 °C.

The north and west of the country could see gales overnight on Sunday through to Monday, however, with strong gusts in places. After that, the weather is set to settle and steadily improve as we go through the week.

You can stay up to date with the latest forecast at www.metoffice.gov.uk/weather

**Date Created**
September 2011

# Typhoon Roke brings heavy rain and strong winds to Japan

## Description

Typhoon Roke made landfall at about 0600 UTC 21 September near Hamamatsu on the south coast of Japan. Winds were estimated to be close to 100 mph near the typhoon centre and the lowest central pressure recorded was 952mb.

Rainbands extended along way ahead of the typhoon as it approached and 598mm (23.5?) rain were recorded at Tokushima (west of the landfall point) in the 48 hours prior to the centre reaching Japan. Rain and the strongest winds have now cleared from southern and western parts of Japan.

As of 1200 UTC Japan Meteorological Agency still classified Roke as a typhoon centred over eastern parts of Honshu a short distance south-west of Fukushima. Heavy rain is continuing in this region and will do so for a few more hours before clearing. It is likely to be downgraded to a tropical storm soon.

The centre of the storm is currently emerging back out over the ocean east of northern Honshu. It is expected to accelerate north-east and becomes a strong post-tropical storm in the north Pacific Ocean.

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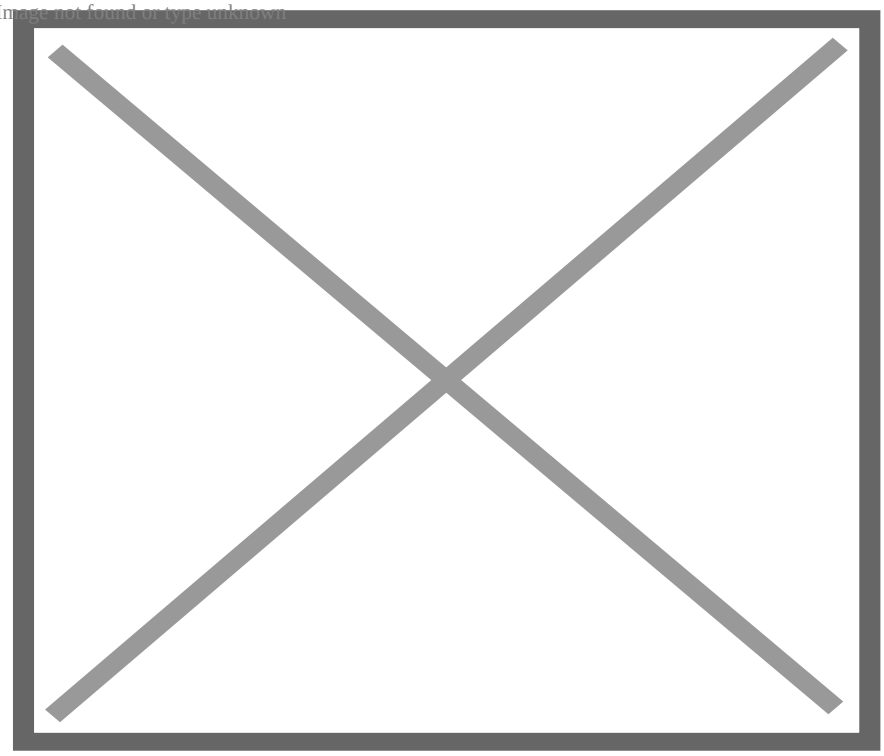

Radar imagery of Typhoon Roke

Met Office updates on Twitter: @metofficestorms

**Date Created**
September 2011

# Met Office in the Media: 20 September 2011

## Description

There has been widespread coverage in the media today about an impending cold winter and snow in October. Britain faces an early big freeze in the Express and Britain to be hit by snow in October… in the Daily Mail both report that Exacta Weather forecast snow in parts of the UK as early as next month. It should be made clear that these forecasts for the coming months are not from the Met Office. When we asked the public what types of forecasts they would like you told us that you would find a monthly forecast more useful. Currently this forecast, which is updated regularly with the latest forecast information, takes us through the first few weeks of October and says:

> *Temperatures are expected to be around normal for the time of year across much of the UK by day, dropping below normal at night, especially across the Midlands and southeast, leading to an increased incidence of overnight frosts. The cooler conditions at night will be mitigated by day in some parts by sunnier than normal weather, with both the far south and far north of the country favoured to see above normal amounts of sunshine, with nearer normal sunshine hours elsewhere. Rainfall amounts are correspondingly likely to be a little below average in most areas, especially in the west.*

To provide some context it certainly would not be a surprise to see overnight frosts and even some snow across higher parts of Scotland in October. Historically, looking at the long term climatology, snow falls on around 3 or 4 days in a typical October across the Highlands of Scotland and on 1 or 2 days in the Southern Uplands and northern Pennines.

Therefore, it's never too early to be prepared for winter – especially as we know from experience the types of severe weather we can see in the UK during the winter months.

As a result it is vital that service providers, ahead of any winter, have plans in place to respond to Met Office 1-5 day forecasts and warnings. These provide good advice, and can be used with a relatively high degree of confidence. Therefore the Met Office has been working with service providers such as BAA and DH to help them develop robust plans and prepare for any severe weather.

It is out short term forecasts, used for example by government, local councils, train, air and road operators that can help to minimise the impacts of severe weather on you and your community.

**Date Created**
September 2011

# Times Atlas of the World and Greenland Icesheet

## Description

The latest edition of the Times Atlas of the World shows a reduced amount of ice and snow over Greenland which has been attributed to climate change by the publishers. This has resulted in debate among climate science experts on if this is really the case. Without seeing the precise mapping methods used in the Times Atlas it would be wrong to comment in detail on the changes between editions.

However, there has certainly been widespread warming in the coastal regions of Greenland over the past 20 years, but whether this has been caused by increasing greenhouse gases or by natural climate variations (e.g. the North Atlantic Oscillation) is not definitely known yet.

The large Greenland ice sheet is of interest because of its potential contribution to global sea level rise. Complete loss of the Greenland ice sheet would result in around 6 metres of sea level rise globally, although the effect would be less around the UK, and sea level might actually fall near Greenland because the gravitational attraction of the ice sheet currently attracts sea water towards it. While the regions shown as lost permanent ice in the Times Atlas are quite large in area, the ice/snow thickness there is small so the effect on sea level would not be expected to be large.

Observations suggest that the Greenland ice sheet has recently been shrinking at a rate that contributes a few tenths of a millimetre per year to global sea level. Some of the outlet glaciers which discharge icebergs from the edge of the ice sheet into the North Atlantic have been accelerating, however it is not yet clear whether this is part of a long term trend or just short term variations.

Over the coming century it is expected that Greenland will contribute up to 20 cm to global sea level rise (from a total of around 20-80 cm), depending on the actual amount of increase in greenhouse gases and other factors. However, current scientific understanding of ice flow and outlet glaciers is relatively limited, so it is hard to make confident predictions of their contribution. Climate scientists are currently working to continue observing the ice sheet for longer and to improve models of the processes controlling ice flow. Over time this will result in more confident predictions of the future of the ice sheet and any changes to sea level.

**Date Created**
September 2011

# United States National Snow and Ice Data Centre records second lowest minimum for Arctic sea ice

## Description

Arctic sea ice extent appears to have reached its second lowest minimum since records began, according to the latest figures from the National Snow and Ice Data Centre (NSIDC) in the US.

Sea ice extent was 4.33 million square kilometres at its lowest point on 9 September, just greater than the previous lowest minimum set in 2007.

Arctic Sea Ice Extent

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Arctic sea ice data. Grey line indicates 1979 to 2000 average extent for the day shown. Source: NSIDC

Satellite records began in 1979 and have shown a long-term decline in sea ice extent. However, the rate of decline has accelerated in the past 15 years and the last five years make up the lowest five extents in the 32-year record.

Helene Hewitt, an expert in climate modelling at the Met Office, said: “The low ice extent this year appears to be mostly caused by high pressure systems that have persisted for much of the summer over the Arctic. This year’s minimum adds to the continuing pattern of accelerating ice loss over the last 15 years.”

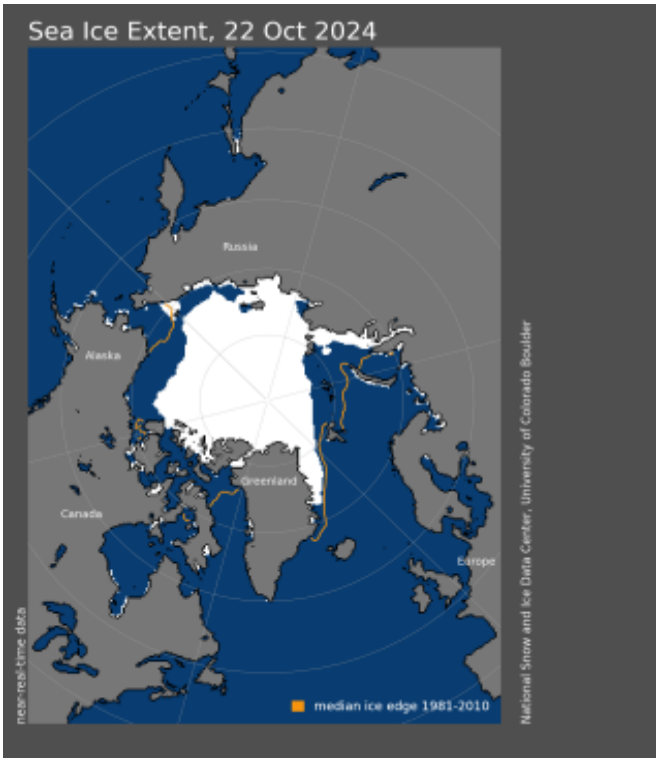
Climate models which simulate future Arctic sea ice extent show wide variations, but Met Office results suggest the area could be nearly ice-free in summer as early as 2040.

Dr Hewitt added that the models do not suggest the current accelerated rate of decline would continue or that there was any ‘tipping point’ from which ice extent could not recover.

She said: “Periods of accelerating ice loss are not unusual in climate models, but there is no reason to expect that to continue. We could see periods of relatively small loss in summer sea ice in the future.

“There is certainly no indication from observations or models that a tipping point in Arctic sea ice has been reached. Indeed, models show that if there is a decrease in global temperature, summer ice extent could recover.”

The NSIDC results broadly agree with those from the other two organisations monitoring sea ice extent, the University of Bremen and the Japan Aerospace Exploration Agency. All use slightly different methods, with Bremen concluding this year is an all time low, while Japanese data shows this year as the second lowest minimum.



Arctic sea ice data . Orange line indicates 1979 to 2000 average extent for the day shown. Source: NSIDC

Next month the Met Office will publish an in-depth article on modelling of Arctic sea ice extent.

**Date Created**
September 2011

# Met Office in the Media: 16 September 2011

## Description

The Met Office probability weather game has received positive coverage from around the world after becoming the largest study on the understanding of probabilistic weather forecasts undertaken. The Washington Post reported on how game players were contributing to the science of communicating uncertainty in weather forecasting, whilst Digital River review the game, reporting: “The efficacy of a well-designed ‘gamification’ strategy has been demonstrated brilliantly by the Met Office in this case.”

The use of probabilities in weather forecasting has been a topic of debate for many years but there is little in the way of research on how to present the extra information contained in these forecasts. So far the game, which sees players helping Brad the ice-cream man by providing probability-based weather advice, has been played nearly 8,000 times. There is only a limited amount of time left to play the game, which is available at www.metoffice.gov.uk/weather/weather-game. The scientists leading the project are hoping that more people can take part to give even more comprehensive results.

Elsewehere several newspapers including The Times have reported on a project to take old weather records and use the to re-analyse past climate. ACRE (Atmospheric Circulation Reconstructions over Earth) aims to recover sparse historical weather observations which are then processed to create reconstructions or ‘reanalyses’ of the world’s climate over the last 200 years. A huge catalogue of old weather data, from the ships’ logs of historic voyages to World War I Royal Navy records, is being used for an international project to recreate the world’s past climate. The reanalysis will show the state of the atmosphere at six hourly intervals to give unprecedented detail about past weather. The end product will have a huge number of potential uses – including understanding future climate. Rob Allan , leading ACRE for the Met Office, said: “This project will help to shed much more light on the patterns, variability and changes in our past climate. This will not only help give us more confidence in our understanding of the past, but also allow us to better assess our predictions for the future.”

### Related articles

- Play the Met Office online weather game – can you beat the top score? (metofficenews.wordpress.com)

**Date Created**
September 2011

# Monsoon rains bring devastating floods to southern Pakistan

## Description

Parts of Pakistan and Thailand have seen devastating floods after two weeks of persistent torrential rain. The floods have come at a time when many parts of South Asia expect heavy rainfall as part of the region’s summer monsoon, but it has been particularly heavy for the affected areas and it has come late in the season.

It is usual for monsoon rainfall to vary from year-to-year and for there to be large regional differences in the amount of rain, but what has caused the problems this year?

Observations show there has been a series of low pressure systems passing over Pakistan from northern India over the past two weeks, with little respite in between. This has given no time for water to flow away or seep into the ground, causing a build up of floodwater.

With the rain coming so late in the season, there are indications that the region’s monsoon is continuing beyond its usual length. This means the conditions which persist in a monsoon and bring the heavy rainfall have allowed the low pressure systems to continue to move over the region, bringing the heavy rains with them. It’s not clear why the monsoon would be extended like this, but there is some suggestion that this may be related to knock-on effects from long-term cycles in sea-surface temperatures in the Pacific and Indian Oceans, although it could also be part of the normal year to year variability in the length of the monsoon period.

In 2010, while the flooding was similarly devastating, the reasons behind it were different. This came in the middle of the monsoon season and most of the heaviest rainfall came from a single low pressure system which moved over the region over a period of four or five days. Such low pressure systems aren’t unusual, but in this case it was unusually intense and moved very far to the west – causing the floods. The low pressure system was intense because atmospheric conditions prevailing at the time meant the low pressure dragged in additional warm moist air from the Indian Ocean, intensifying the rains.

**Date Created**
September 2011

# What to do in severe windy weather

## Description

**Make sure you know what to do when severe weather is forecast**

The first and most vital thing to do is check local and national weather forecasts  and keep up to date with the latest warnings from the Met Office. Check the latest forecast for your area on our severe weather page.

You can also sign up to our severe weather RSS feed or severe weather twitter account for your local area.

For more information on our severe weather warnings service, watch our video guide.

**If a yellow alert or warning has been issued: be aware**

During yellow alert or warning be aware of the likely conditions and ensure you access the latest weather forecast for up to date weather information. Be aware that:

- Some branches or trees may be brought down.
- There may be localised travel disruption and problems for high-sided vehicles on prone routes.
- You should drive with care, especially on exposed routes.
- There’s a possibility of debris being blown around.

**If an orange alert or warning has been issued: be prepared**

During orange alert or warning be prepared for disruption. Take precautions where possible and ensure you access the latest weather forecast. Be prepared for:

- More widespread tree damage and other debris, like roof tiles coming loose.
- Minor structural damage.
- Risk of injury from flying debris.
- Some travel disruption e.g. closed bridges.
- Some localised interruptions to power.

**If a red alert or warning has been issued: take action**

During red alert or warning keep up to date with the forecast and take action to protect yourself and your property:

Before the storm

- Secure loose objects such as ladders, garden furniture or anything else that could be blown around.
- Close and securely fasten doors and windows.
- Park vehicles in a garage or keep them clear of buildings, trees, walls and fences.

During the storm

- Stay indoors as much as possible.
- If you do go out, try not to walk or shelter close to buildings and trees.
- Do not go outside to repair damage while the storm is in progress.
- Do not drive unless your journey is really necessary.

After the storm

- Be careful not to touch any electrical/telephone cables that have been blown down or are still hanging.
- Do not walk too close to walls, buildings and trees as they could have been weakened.

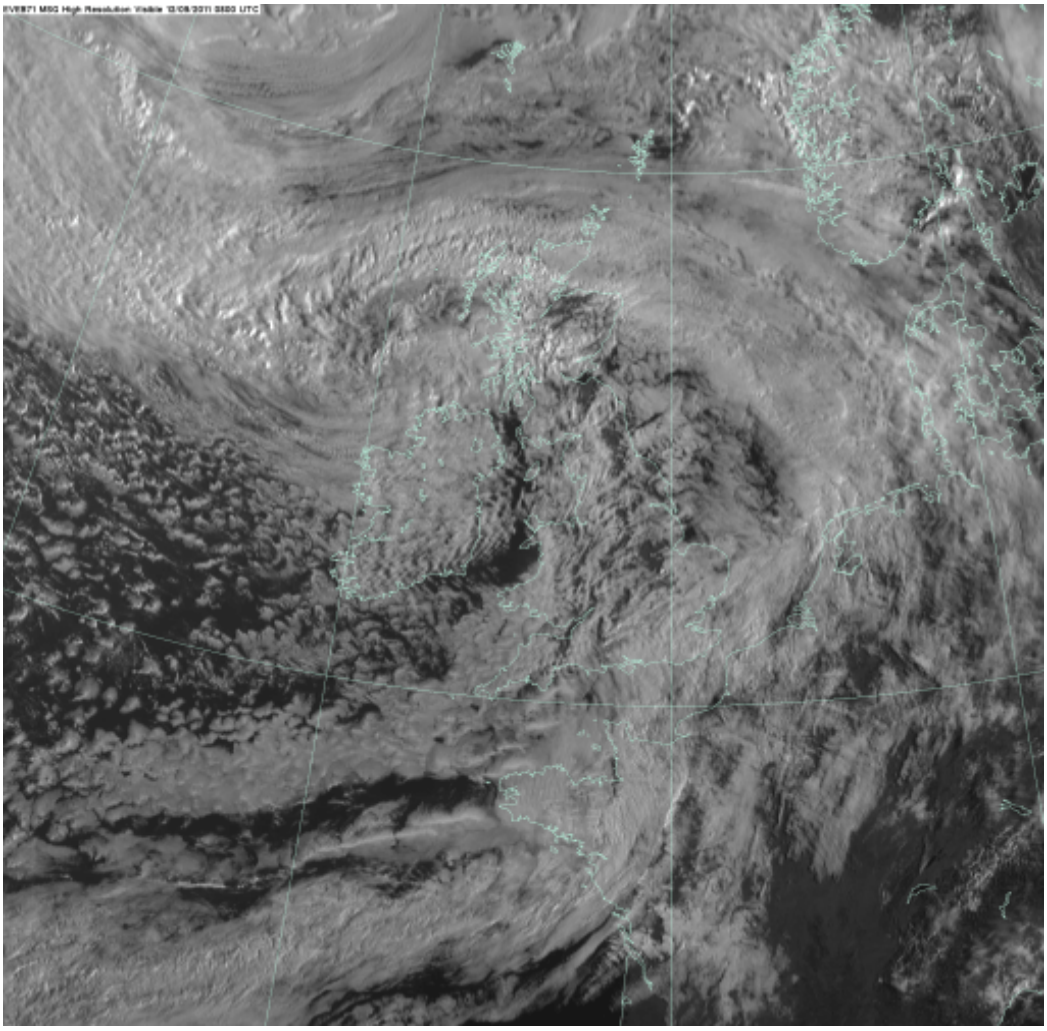
**Date Created**
September 2011

# Latest update as post-tropical storm Katia reaches the UK

## Description

The deep area of low pressure which contains post-tropical storm Katia  was, at 9 am, centred approximately 200 miles northwest of Sligo, Ireland with a central pressure of 966 hpa. This can be seen on the satellite image below – the swirl of cloud to the west of Scotland/north of Northern Ireland is the low pressure system which was Katia.

Winds are strengthening,  with a recent gusts of up to 82 mph at Capel Curig in the mountains of North Wales. Elsewhere winds are widely gusting to 40 to 50 mph, with further strengthening expected across some northern areas through today.



Infra-red satellite image of storm affecting the UK at 9 am on Monday 12th September Source: EUMETSAT/Met Office

For the latest update for your area visit our severe weather warnings page. We'll also be keeping you

up to date on Twitter and Facebook. You may also like to follow Met Office storms on Twitter, who are tracking the progress of Katia and other tropical storms, hurricanes, typhoons and cyclones.

**Related articles**

- How often do the remains of hurricanes affect the UK (metofficenews.wordpress.com)

**Date Created**
September 2011

# Update on Katia as she heads toward the UK as a post-tropical storm

## Description

The forecasting team at the Met Office are continuing to keep an eye on the remains of Hurricane Katia as it moves across the Atlantic Ocean. Katia is now a post-tropical depression lying around 600 miles west-southwest of Ireland with a central pressure of around 966 mbar. The system is expected to continue to move northeastwards across the Atlantic, increasingly affecting northern UK during Monday. Please keep up to date with the latest on our warnings page.

### Related articles

- How often do the remains of hurricanes affect the UK (metofficenews.wordpress.com)

**Date Created**
September 2011

# How often do the remains of hurricanes affect the UK

## Description

Hurricane Katia, currently in the western Atlantic is set to steam due east towards the UK and is expected to reach our shores as a post tropical storm later in the weekend. With it will come the risk of severe gales and heavy rain to parts of the UK. The strength and depth of this September storm is quite unusual, but similar storms that originated as hurricanes have affected the UK in the last 20 years several times.

**Hurricane Bill – 2009**

You only have to look back as far as 2009 to find a storm that crossed the Atlantic. Hurricane Bill formed on August 15th and reached the UK as a post tropical storm on August 25th, bringing severe gales and heavy rain two days after being downgraded from a hurricane to a tropical storm.

The path of Hurricane Bill in 2009. The storm crossed the Atlantic as a post tropical storm pushing into the UK and Ireland

**Alberto, Gordon and Helene – 2006**

In 2006, three post tropical storms reached the UK. Alberto, Gordon and Helene all brought wet and

windy weather to the UK. Alberto combined with a cold front to the west of the UK whilst Gordon brought record warm temperatures as tropical air pushed north across the UK, but also strong winds that brought down power lines in Northern Ireland.

**Isaac and Leslie – 2000**

These two post tropical storms both affected the British Isles as in the year 2000.

**Hurricane Karl – 1998**

Hurricane Karl made its way to affect parts of southern Britain as a post tropical storm in 1998.

**Hurricane Lili – 1996**

Perhaps the most similar storm to Katia was in 1996 when the remains of hurricane Lili pushed across the UK just one day after being downgraded from a hurricane. The post tropical storm ran across Britain on 28th and 29th October. The storm brought gusts in excess of 90 mph, bringing widespread impacts across the UK and causing significant disruption.

Path of Hurricane Lili in 1996

**Hurricane Katia – 2011**

Katia is currently a category one hurricane off the east coast of the US and will run across the Atlantic through the weekend bringing the risk of severe gales and storm force winds in places later on Sunday and through Monday.

Although it is expected to be windy everywhere, it is uncertain as to exactly which parts of the country will see the very strongest winds and therefore you should stay up to date with the latest forecast warnings.

**Date Created**
September 2011

# Wet and windy weather signals the start of Autumn

## Description

This week is forecast to be one of the windiest of the year, a typical beginning to autumn. Autumn is well known for its wet and windy weather stripping the colourful leaves from the trees.

One of the reasons behind the autumnal gales is at this time of year the earth is tilted so that the sun is over the equator. This means that the poles are cooling down whereas the sub tropics remain very warm, creating a massive temperature contrast over our half of the globe.

The deep areas of low pressure that you see on a weather map are caused by the differences in temperature between the cold pole to the north of the UK and the hot equator to the south. It is nature’s desire to even out these temperature differences and it is this that causes these vigorous systems to form, resulting in a lot of wind and rain.

So there is one benefit of the wet and windy week to come – without it, it would either be too hot or too cold.

**Date Created**
September 2011

# Apache helicopter pays a visit to the Met Office

## Description

The Met Office's Exeter HQ had a visit from Army Air Corps aircrew and their Apache attack helicopter last week.

The Apache, from Middle Wallop in Hampshire, flew over the Met Office HQ as part of a routine training flight. This was a rare opportunity for Met Office staff outside of Middle Wallop to see the aircraft up close.

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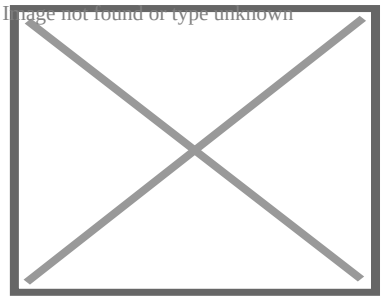

Apache helicopter in the skies above the Met Office HQ in Exeter

Army Air Corps and Met Office staff often meet to discuss how to continue developing services and use the latest advances in technology in support of operations.

The Met Office provides the British Armed Forces with a world-leading range of tailored information. The weather and other environmental factors can have a critical impact on the success of military operations.

Major Buzz Robinson, from 673 Squadron Middle Wallop, said: "When it comes to flying helicopters, weather is crucial to everything we do. It affects everything from how high we can fly, the range of our weapons, journey times and even how much fuel we take on board. Met Office staff do an amazing job to ensure we have the very best information and guidance, specific to our needs that enable us to make tactical decisions."

As well as a range of services provided by staff at the Met Office HQ, there is also a dedicated team of forecasters based at Middle Wallop. Specially trained Met Office forecasters also work at Mobile Met Units close to the front line.

Ric Robins, from the Forecasting Delivery Team for Defence Operations at the Met Office, said: "As well as being meteorologists, our long history and strong relationship of working with UK Armed Forces means we understand how weather can affect military operations. We can help them operate efficiently, effectively, and maintain a tactical advantage wherever they are in the world."

**Date Created**
September 2011